

# Arne V Johansson

## List of Publications by Year in Descending Order

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**Version:** 2024-04-10

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

50 papers	2,616 citations	23 h-index	50 g-index
50 ext. papers	2,889 ext. citations	3.6 avg, IF	4.85 L-index

#	Paper	IF	Citations
50	Explicit Algebraic Reynolds-stress Modelling of a Convective Atmospheric Boundary Layer Including Counter-Gradient Fluxes. <i>Boundary-Layer Meteorology</i> , <b>2021</b> , 178, 487-497	3.4	0
49	Modelling of Stably Stratified Atmospheric Boundary Layers with Varying Stratifications. <i>Boundary-Layer Meteorology</i> , <b>2020</b> , 176, 229-249	3.4	1
48	Design of the centrifugal fan of a belt-driven starter generator with reduced flow noise. <i>International Journal of Heat and Fluid Flow</i> , <b>2019</b> , 76, 72-84	2.4	6
47	Consistent Boundary-Condition Treatment for Computation of the Atmospheric Boundary Layer Using the Explicit Algebraic Reynolds-Stress Model. <i>Boundary-Layer Meteorology</i> , <b>2019</b> , 171, 53-77	3.4	5
46	Improving LES with OpenFOAM by minimising numerical dissipation and use of explicit algebraic SGS stress model. <i>Journal of Turbulence</i> , <b>2019</b> , 20, 697-722	2.1	7
45	Warm summers during the Younger Dryas cold reversal. <i>Nature Communications</i> , <b>2018</b> , 9, 1634	17.4	57
44	A novel method to determine the natural course of unruptured brain arteriovenous malformations without the need for follow-up information. <i>Journal of Neurosurgery</i> , <b>2018</b> , 129, 10-16	3.2	4
43	Improving separated-flow predictions using an anisotropy-capturing subgrid-scale model. <i>International Journal of Heat and Fluid Flow</i> , <b>2017</b> , 65, 246-251	2.4	2
42	Taking large-eddy simulation of wall-bounded flows to higher Reynolds numbers by use of anisotropy-resolving subgrid models. <i>Physical Review Fluids</i> , <b>2017</b> , 2,	2.8	7
41	Algebraic Reynolds stress modeling of turbulence subject to rapid homogeneous and non-homogeneous compression or expansion. <i>Physics of Fluids</i> , <b>2016</b> , 28, 026101	4.4	3
40	DNS Analysis of Wall Heat Transfer and Combustion Regimes in a Turbulent Non-premixed Wall-jet Flame. <i>Flow, Turbulence and Combustion</i> , <b>2016</b> , 97, 951-969	2.5	8
39	Study of Transitions in the Atmospheric Boundary Layer Using Explicit Algebraic Turbulence Models. <i>Boundary-Layer Meteorology</i> , <b>2016</b> , 161, 19-47	3.4	9
38	Capturing turbulent density flux effects in variable density flow by an explicit algebraic model. <i>Physics of Fluids</i> , <b>2015</b> , 27, 045108	4.4	3
37	Large eddy simulation of channel flow with and without periodic constrictions using the explicit algebraic subgrid-scale model. <i>Journal of Turbulence</i> , <b>2014</b> , 15, 752-775	2.1	15
36	A stochastic extension of the explicit algebraic subgrid-scale models. <i>Physics of Fluids</i> , <b>2014</b> , 26, 055113	4.4	8
35	Simulation of finite-size fibers in turbulent channel flows. <i>Physical Review E</i> , <b>2014</b> , 89, 013006	2.4	34
34	Direct Numerical Simulation of Turbulent Pipe Flow at Moderately High Reynolds Numbers. <i>Flow, Turbulence and Combustion</i> , <b>2013</b> , 91, 475-495	2.5	169

33	An explicit algebraic Reynolds-stress and scalar-flux model for stably stratified flows. <i>Journal of Fluid Mechanics</i> , <b>2013</b> , 723, 91-125	3.7	23
32	Heat release effects on mixing scales of non-premixed turbulent wall-jets: A direct numerical simulation study. <i>International Journal of Heat and Fluid Flow</i> , <b>2013</b> , 40, 65-80	2.4	7
31	An explicit algebraic model for the subgrid-scale passive scalar flux. <i>Journal of Fluid Mechanics</i> , <b>2013</b> , 721, 541-577	3.7	18
30	A realizable explicit algebraic Reynolds stress model for compressible turbulent flow with significant mean dilatation. <i>Physics of Fluids</i> , <b>2013</b> , 25, 105112	4.4	4
29	Sixth International Symposium on Turbulence and Shear Flow Phenomena. <i>Journal of Turbulence</i> , <b>2011</b> , 12, N14	2.1	5
28	Direct numerical simulation of an isothermal reacting turbulent wall-jet. <i>Physics of Fluids</i> , <b>2011</b> , 23, 085104	4.4	14
27	Explicit algebraic subgrid stress models with application to rotating channel flow. <i>Journal of Fluid Mechanics</i> , <b>2009</b> , 639, 403-432	3.7	40
26	Direct numerical simulation of a plane turbulent wall-jet including scalar mixing. <i>Physics of Fluids</i> , <b>2007</b> , 19, 065102	4.4	43
25	High Order Accurate Solution of Flow Past a Circular Cylinder. <i>Journal of Scientific Computing</i> , <b>2006</b> , 27, 431-441	2.3	20
24	Evaluation of a new wind tunnel with expanding corners. <i>Experiments in Fluids</i> , <b>2004</b> , 36, 197-203	2.5	16
23	Investigations of shear free turbulent diffusion in a rotating frame. <i>Proceedings in Applied Mathematics and Mechanics</i> , <b>2004</b> , 4, 458-459	0.2	
22	Evaluation of scaling laws derived from Lie group symmetry methods in zero-pressure-gradient turbulent boundary layers. <i>Journal of Fluid Mechanics</i> , <b>2004</b> , 502, 127-152	3.7	30
21	LES computations and comparison with Kolmogorov theory for two-point pressure-velocity correlations and structure functions for globally anisotropic turbulence. <i>Journal of Fluid Mechanics</i> , <b>2000</b> , 403, 23-36	3.7	8
20	DNS and Modelling of Passive Scalar Transport in Turbulent Channel Flow with a Focus on Scalar Dissipation Rate Modelling. <i>Flow, Turbulence and Combustion</i> , <b>2000</b> , 63, 223-245	2.5	37
19	Derivation and investigation of a new explicit algebraic model for the passive scalar flux. <i>Physics of Fluids</i> , <b>2000</b> , 12, 688-702	4.4	53
18	Development and calibration of algebraic nonlinear models for terms in the Reynolds stress transport equations. <i>Physics of Fluids</i> , <b>2000</b> , 12, 1554-1572	4.4	46
17	An explicit algebraic Reynolds stress model for incompressible and compressible turbulent flows. <i>Journal of Fluid Mechanics</i> , <b>2000</b> , 403, 89-132	3.7	524
16	Measurement and modelling of homogeneous axisymmetric turbulence. <i>Journal of Fluid Mechanics</i> , <b>1998</b> , 374, 59-90	3.7	22

15	Shear-free turbulence near a wall. <i>Journal of Fluid Mechanics</i> , <b>1997</b> , 338, 363-385	3.7	30
14	Very large structures in plane turbulent Couette flow. <i>Journal of Fluid Mechanics</i> , <b>1996</b> , 320, 259	3.7	151
13	Modelling of rapid pressure-strain in Reynolds stress closures [Difficulties associated with rotational mean flows. <i>Flow, Turbulence and Combustion</i> , <b>1994</b> , 53, 119-137		3
12	Modelling of rapid pressure-strain in Reynolds-stress closures. <i>Journal of Fluid Mechanics</i> , <b>1994</b> , 269, 143-168	3.7	52
11	A mechanism for bypass transition from localized disturbances in wall-bounded shear flows. <i>Journal of Fluid Mechanics</i> , <b>1993</b> , 250, 169-207	3.7	167
10	Design of guide vanes for minimizing the pressure loss in sharp bends. <i>Physics of Fluids A, Fluid Dynamics</i> , <b>1991</b> , 3, 1934-1940		11
9	Direct simulation of turbulent spots in plane Couette flow. <i>Journal of Fluid Mechanics</i> , <b>1991</b> , 229, 499	3.7	163
8	Evolution and dynamics of shear-layer structures in near-wall turbulence. <i>Journal of Fluid Mechanics</i> , <b>1991</b> , 224, 579-599	3.7	115
7	An algebraic model for nonisotropic turbulent dissipation rate in Reynolds stress closures. <i>Physics of Fluids A, Fluid Dynamics</i> , <b>1990</b> , 2, 1859-1866		54
6	Turbulence reduction by screens. <i>Journal of Fluid Mechanics</i> , <b>1988</b> , 197, 139-155	3.7	131
5	On the generation of high-amplitude wall-pressure peaks in turbulent boundary layers and spots. <i>Journal of Fluid Mechanics</i> , <b>1987</b> , 175, 119	3.7	81
4	Direct drag measurements for a flat plate with passive boundary layer manipulators. <i>Physics of Fluids</i> , <b>1986</b> , 29, 696		18
3	On the detection of turbulence-generating events. <i>Journal of Fluid Mechanics</i> , <b>1984</b> , 139, 325-345	3.7	68
2	Effects of imperfect spatial resolution on measurements of wall-bounded turbulent shear flows. <i>Journal of Fluid Mechanics</i> , <b>1983</b> , 137, 409-421	3.7	116
1	On the structure of turbulent channel flow. <i>Journal of Fluid Mechanics</i> , <b>1982</b> , 122, 295	3.7	208